

ABSTRACT

A thermal air flowmeter having excellent temperature characteristics and improved measurement accuracy. The thermal air flowmeter comprises a temperature sensor disposed in a casing of the air flowmeter, a computing unit for correcting a flow rate detection voltage from a measuring element by using the temperature sensor, and heating temperature control means disposed in a temperature control circuit for performing temperature control of a heating resistor to vary a temperature rise of the heating resistor relative to an air temperature depending on the air temperature. Flow rate detection errors of the thermal air flowmeter caused by an overall temperature change and a temperature change on an intake passage wall surface can be corrected simultaneously and a thermal air flowmeter having superior measurement accuracy can be realized.